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ON SEA TURTLE BIOLOGY AND CONSERVATION**

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RADIO AND SONIC TELEMETRIC MONITORING OF IMMATURE GREEN SEA TURTLES IN THE BRAZOS-SANTIAGO PASS AREA, SOUTH PADRE ISLAND, TEXAS

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A cooperative study between the National Marine Fisheries Service, Galveston and Texas A&M University, Galveston was conducted on movements (NMFS) and habitat characterization (TAMU) of green sea turtles at the Brazos-Santiago Pass jetties, South Padre Island, Texas, from 31 July to 26 September 1992. The NMFS portion of the study is discussed here. Nine turtles were fitted with sonic and backpack radio transmitters. Two of these were given trailing floats containing a time-depth recorder. A tenth turtle was given only a sonic transmitter. Releases were at point of capture. Monitoring from boat and land averaged 9-10 hours per day. Observation data were grouped into the categories dawn (05:00-09:00), day (09:00-17:00), dusk (17:00-21:00), and night (21:00-05:00) for analysis. Eight turtles remained near the jetty area throughout the study period. These turtles generally stayed within 10 m of the rocks. Total study period movements along jetties ranged from less than 370 m to over 1200 m. Core areas (areas containing $\geq 50\%$ of observation time) ranged from 46 to 275 m and often varied by time of day. The channel was seldom used, with most use by the two largest turtles. Analysis of surface/submerged times indicate that dive intervals shorten during early morning and evening, and are longest at night. Results appear to demonstrate that these turtles have at least short-term range fidelity, have very little use of the channel, and are most active at dawn/dusk and least active at night.